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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,621	07/30/2003	Hajime Sato	00862.023147	9119

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EXAMINER
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SHENG, TOM V

ART UNIT	PAPER NUMBER
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2677

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/629,621

Applicant(s)

SATO ET AL.

Examiner

Tom V. Sheng

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-13, 19 and 21 is/are allowed.
- 6) ☒ Claim(s) 1-4, 14-18 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claims 1-4, 18 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As for claims 1, 18 and 20, it is unclear how the "predetermined coordinates" are associated and related to the distance between the coordinate input surface and the coordinate input pointing tool. Specifically, are these "predetermined coordinates" on the coordinate input surface? Are these "predetermined coordinates" used in the calculation means? Claims 2-4 are dependent on claim 1.

### ***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Greanias et al. (US 4,764,885).

As for apparatus claim 1, associated method claim 18 and program claim 20, Greanias teaches a coordinate input apparatus which calculates position coordinates of a coordinate input pointing tool with respect to a coordinate input surface, comprising:  
calculation means (maximum detector 70 in association with three-input AND

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gates 66 and 68, Y-REG 60 and X-REG 62; fig. 3) for calculating the position coordinates of the coordinate input pointing tool (when stylus 75 is detected by the array 28, X and Y outputs are supplied from Y-REG 60 and X-REG 62 via the AND gates 66 and 68; column 6, lines 23-49);

change means (Y REG 67, X REG 69 and cursor image generator 72; or alternatively the Y OUTPUT REG 80, X OUTPUT REG 82 and stylus trace generator 84) for changing the position coordinates on the basis of predetermined coordinates related to a distance between the coordinate input surface and the coordinate input pointing tool (when the stylus 75 is brought to a distance between Z1 and Z3, the cursor image generator 72 is enabled to generate a cursor image; alternatively when the stylus 75 is closer than Z3, the stylus trace generator is enabled to generate a stylus trace; column 7, line 54 through column 9, line 7); and

output means (display adapter 25 and display device 76) for outputting the position coordinates changed by said change means (cursor is displayed in relation to the phase or Z position of the stylus 75; see fig. 6).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greanias et al.

As for claim 3, Greanias does not teach the use of an interpolation means for interpolating the position coordinates changed by the change means. On the other hand, interpolation of coordinates between two calculated or known coordinates are frequently used when another measurement is not needed or not convenient.

As for claim 4, Greanias' coordinate input device does not use ultrasonic wave generation means; however the use of ultrasound and corresponding means for detection of coordinate input is an obvious alternative to other methods such as capacitive, resistive or optical detection.

6. Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Usuda et al. (US 6,700,129 B1).

As for claim 14, Usuda teaches a coordinate input pointing tool of a coordinate input apparatus having a coordinate input surface on which an X-Y plane and a Z-axis with respect to the X-Y plane are defined, comprising:

a first switch (pen-press switch 36; fig. 5) which is arranged at a distal end portion and can be pressed (switched on a drawing state when the tip is pressed; column 7, line 59 through column 8, line 12);

at least two, second and third switches (switches 34 and 35; fig. 4) which are arranged on a housing of the coordinate input pointing tool (arranged on shaft 32 of the coordinates-inputting pen 13; column 7, lines 40-45); and

production means for producing a first control signal (from commands similar to a specific type of mouse click) when at least one of said second and third switches is in an operative state (column 7, lines 53-58).

Usuda does not teach producing a second control signal when both of said second and third switches are in the operative state. On the other hand, it would have been obvious to one of ordinary skill to provide a different function (as simply as turning on the power of the pen 13) from mouse clicks by engaging both the second and third switches.

As for claim 15, Usuda does not teach engaging the pen-press switch 36 also for a mouse click as either of switches 34 and 35. On the other hand, it would have been obvious to utilize one of the switches 34 and 35 to activate the drawing state, since it advantageously allows "drawing" to occur without the need to maintain a pressure of the pen 13 on a surface constantly.

As for claims 16 and 17, the switches 34 and 35 are arranged adjacent to each other along the axis of the shaft 32. However, the arrangement would not affect the functions and is simply a matter of design consideration.

***Allowable Subject Matter***

7. Claims 5-13, 19 and 21 are allowed.
8. Claim 2 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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9. The following is a statement of reasons for the indication of allowable subject matter: none of the prior arts of record teaches the limitations “wherein said change means changes the position coordinates by multiplying the position coordinate values by a predetermined coefficient on the basis of the coordinates related to the distance between the coordinate input surface and the coordinate input pointing tool” of claim 2 and “control means for controlling output of the position coordinates (X,Y,Z) calculated by said calculation means, on the basis of the determination result of said determination means or the determination result of said determination means and a comparison result of said comparison means” of claim 5 and corresponding limitations of claims 19 and 21.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom V. Sheng whose telephone number is (571) 272-7684. The examiner can normally be reached on 9:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tom Sheng  
December 2, 2005

AMR A. AWAD  
PRIMARY EXAMINER  
*Amr A. Awad*